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IST-SD SERIES
DIGITAL TORQUE SCREWDRIVER
OPERATION MANUAL

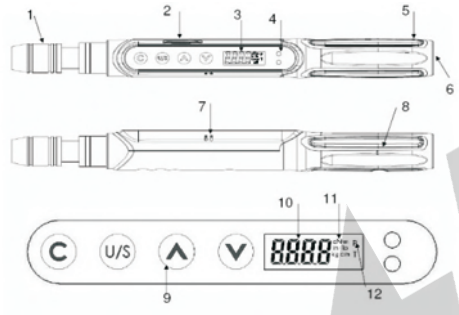
V0

Main Function

- Digital torque value readout
- +/-2.5% or +/-3% accuracy
- CW and CCW operation
- Peak hold and Track mode selectable
- Buzzer and LED indicator for the pre-settable target torque
- Engineer units(cN-m, in-lb, kg-cm) selectable
- Auto power off after about 5 minutes idle
- Recharge batteries are compatible

Description

Structure:



1 Auto Bit Holder 2 Communication Port 3 LCD Readout 4 LED Indicator
5 Anti-slip Handle 6 Battery Cover 7 Buzzer 8 Calibration mark
9 Buttons 10 Torque Value 11 Units 12 Peak/Track Mode

Specification

1 Working Condition:

Operation temperature: -10℃~60℃
Store temperature: -20℃~70℃
Humidity: Can reach 90% if no condensation

2 Parameter

Code		IST-SD50	IST-SD200	IST-SD400
Range		10-50cN.m	40-200cN.m	80-400cN.m
Accuracy	CW	±3%	±2.5%	±2.5%
	CCW	±4%	±3.5%	±3.5%
Resolution		0.1cN.m	0.1cN.m	0.1cN.m
Size of shank(L)		1/4"	1/4"	1/4"
Power supply		1xAAA battery		
Length		193mm	203mm	203mm
Weight		190g	200g	200g

Note:

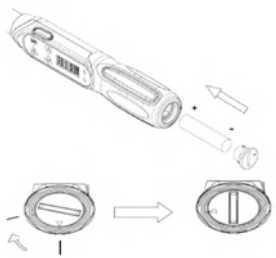
1. The accuracy of readout is guaranteed from 20%-100% of maximum range +/-1 increment. The torque accuracy is a typical value. Calibration point is on the rubber grip. For keeping the accuracy, calibrate the screwdriver for a constant period time(1 year).
2. One cycle means twist the screwdriver from 0 cN.m to maximun range and back to 0 cN.m.
3. Horizontal and vertical test.
4. Environmental test: a. Dry heat b. Cold c. Damp heat d. Change of temperature e. Impact(Shock) f. Vibration g. Drop
5. Electromagnetic compatibility test:
   a. Electrostatic discharge immunity (ESD)
   b. Radiated susceptibility (RS)
   c. Radiated emission (RE)

Before using the screwdriver

Battery installation:

- Remove the battery cap.
- Insert one AAA battery matching the -/+ polarities of the battery to the battery compartment.

- Put on the battery cap and fasten it tightly according to the following figures.



Power on and resetting the screwdriver

- Press C to power on the digital screwdriver.
- Usually press C to reset the digital screw before using it.

Attention: If an external force is applied to the screwdriver during power-on period, an initial torque offset will be recorded in the memory.

Auto power off:

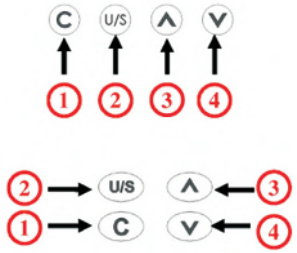
- The screwdriver will auto power off after about 5 minutes idle for power saving. Press C to power on the screwdriver again.

Cautions: During communication period(Send appears), the auto power off function is disabled.

Resetting the screwdriver:

- If the screwdriver does not function normally, loosen the battery cap then tighten it to re-start.

Setup:



1. Power On/Clear
2. Unit Selection/Setting
3. Adjust Torque Value Up
4. Adjust Torque Value Down

1 Step 1: Unit selection

Pre-setting unit: cN.m

Press U/S

Unit Selection: in.lb

Press U/S

Unit Selection: kg.cm

2 Step 2: SET Target Torque

Pre-setting target torque

Press ∧

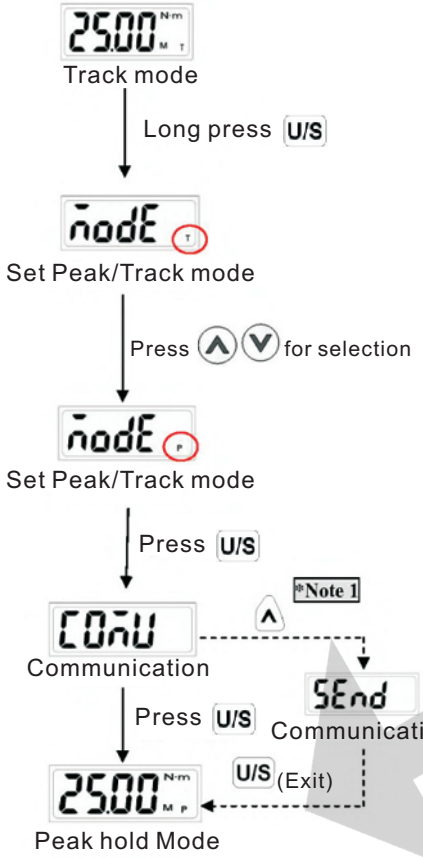
Increase torque value

Press ∨

Decrease torque value

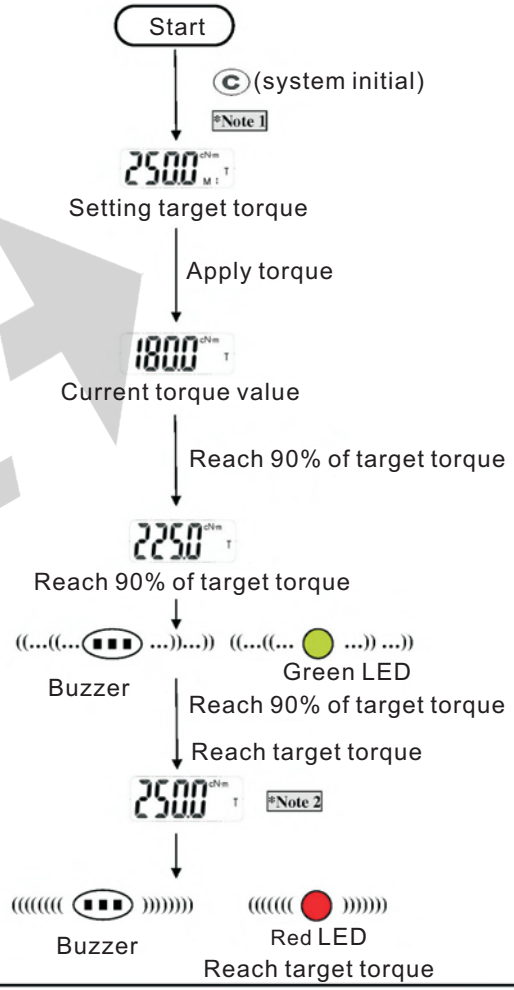
Note:
The “Unit Selection” is cyclic.

3 Step 3: Peak hold/Track mode selection



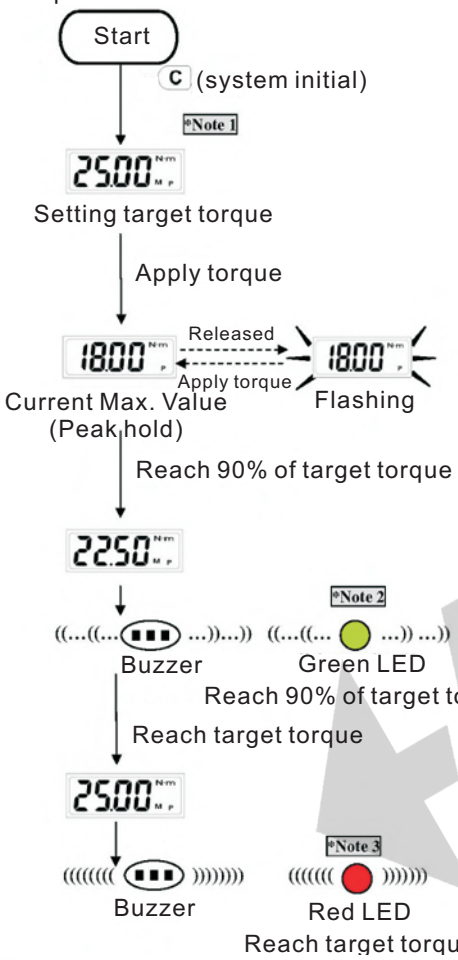
Note:
Communication is for calibration of screwdriver. Please contact your local dealer for information.

Track Mode Operation



Note: 1. If ErO is appeared, that means this screwdriver has ever been applied more than 110% of torque of the spec.
2. When reaching the setting target torque, the green and red LED will be on at the same time.

Peak Hold Mode Operation:



Note: 1. If Er0 is appeared, that means this screwdriver has ever been applied more than 110% of torque of the spec.
2. When reaching the setting target torque, the green and red LED will be on at the same time.

Maintenance

Attention:
One year periodic recalibration is necessary to maintain accuracy.
Please contact your local dealer for calibrations.

1. Over-torque (110% of Max. torque range) could cause breakage or lose accuracy.
2. Do not shake violently or drop screwdriver.
3. Do not use this screwdriver as a hammer.
4. Do not leave this screwdriver in any place exposed to excessive heat, humidity, or direct sunlight.
5. Do not use this apparatus in water.(not waterproof)
6. If the screwdriver gets wet, wipe it with a dry towel as soon as possible. The salt in seawater can be especially damaging.
7. Do not use organic solvents, such as alcohol or paint thinner when cleaning the screwdriver.
8. Keep this screwdriver away from magnets.
9. Do not expose this screwdriver to dust or sand as this could cause serious damage.
10. Do not apply excessive force to the LCD panel.
11. Apply torque slowly and graspe the center of the handle. Do not applu load to the end of the handle.
12. When checking the accuracy or calibration, please use the bit head packed inside the below mold case.

Battery Maintenance

1. When the screwdriver is not used for an extended period of time, remove the battery.
2. Keep a spare battery on hand when in long trip or cold areas.
3. Sweat, oil and water can prevent a battery's terminal from making electrical contact. To avoid this, wipe both terminals before loading a battery.
4. Dispose of batteries in a designated disposal area. Do not throw batteries into a fire.